

What is claimed is:

1. A data contents processing method, comprising the steps for:  
separating audio/video (A/V) signals and data contents upon receipt of a  
5 broadcast signal and extracting information on the currently received channel and  
a program identifier;

constructing a database by forming an integrated information of a  
channel/program identifier information and data contents in connection with each  
other;

10 controlling the conversion of data contents by checking whether or not the  
data contents to be displayed are consistent with the current A/V signal according  
to the integrated information; and

when the data contents is converted to thus select a user-desired data  
contents, displaying the A/V signal and the data contents.

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2. The method according to claim 1, wherein the controlling step  
further comprises the step for controlling a channel conversion.

3. The method according to claim 1, wherein, in the controlling step,  
20 when the user converts the channel using a channel converter, the data contents  
corresponding to the converted channel are selected.

4. The method according to claim 1, wherein, in the controlling step,  
when user-desired data contents are selected by means of the forward/backward  
25 function of the browser for controlling data contents, the current channel is tuned

in to the channel corresponding to the selected data contents

5        5.        The method according to claim 1, wherein the displaying step further comprises the step for displaying only the broadcast channel corresponding to the A/V signal.

10        6.        The method according to claim 1, wherein the data contents processing method further comprises the step for adjusting a channel so as to display A/V signals or A/V signals and data contents, or the step for inputting a user command signal corresponding to the forward/backward function of the browser.

15        7.        A data contents processing method, comprising the steps for:  
separating audio/video (A/V) signals and data contents upon receipt of a broadcast signal of a bit stream and extracting information on the channel of the broadcast signal corresponding to the bit stream and a program identifier;

constructing a database by forming an integrated information of a channel information, program identifier, and data contents in connection with one another;

20        judging whether or not the data contents to be displayed and the current A/V signal are consistent with each other according to the integrated information; and

25        if the data contents to be displayed are not consistent with the current A/V signal according to the integrated information, displaying the A/V signal and the received data contents being consistent with each other upon receipt of the data contents corresponding to the A/V signal.

8. The method according to claim 7, wherein, in the displaying step, if the data contents to be displayed are consistent with the current A/V signal according to the integrated information, the A/V signal and the corresponding data contents are displayed.

9. The method according to claim 7, wherein, in the displaying step, if the data contents corresponding to the A/V signal cannot be received again, the message that the A/V signal cannot be displayed, or the function of the browser is not operable is displayed.

10. The method according to claim 7, wherein the step for judging whether or not the data contents are consistent with the current A/V signal further comprises the step for controlling the channel and the browser according to a user's request, and storing the A/V signal and data contents from the corresponding channel and site.

11. The method according to claim 7, wherein, in the step for judging whether or not the data contents, if the browser function is not operated, only the A/V signal is displayed.

12. A data contents processing method, comprising the steps for:  
separating audio/video (A/V) signals and data contents upon receipt of a broadcast signal of a bit stream and extracting information on the channel of the broadcast signal corresponding to the bit stream and a program identifier;

constructing a database by forming an integrated information of a channel information, program identifier, and data contents in connection with one another;

judging whether or not the data contents to be displayed and the current A/V signal are consistent with each other according to the integrated information;

5 and

if the data contents to be displayed are not consistent with the current A/V signal according to the integrated information, displaying the A/V signal and the received data contents being consistent with each other upon receipt of the data contents corresponding to the A/V signal.

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13. The apparatus according to claim 12, wherein the browser unit further comprises a forward/backward function.

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14. The apparatus according to claim 12, wherein the display unit displays the A/V signal outputted from the inverse multiplexing unit.

15. The apparatus according to claim 12, wherein the database constructing unit further comprises a storage unit for storing the separated data contents.

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16. The apparatus according to claim 12, wherein the integrated information is a tree data structure in which a plurality of programs corresponding to one channel are connected to the channel, and a plurality of data contents corresponding to each program are connected to the program.

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17. The apparatus according to claim 12, wherein, when the user converts the channel using a channel conversion key, the A/V data interface control unit checks whether or not the currently displayed data contents are the data contents corresponding to the converted channel according to the integrated information, and, if not the data contents corresponding to the converted channel,  
5 it controls the browser to select the data contents corresponding to the converted channel.

18. The method according to claim 12, wherein, when the user selects  
10 data contents by means of the forward/backward function of the browser, the A/V data interface control unit checks whether or not the currently displayed channel corresponds to the selected data contents according to the integrated information, and, if the channel does not correspond to the selected contents, it controls the inverse multiplexing unit to tune in to the channel corresponding to the selected  
15 data contents.